

LASCA LEAVES



Los Angeles County Department of Arboreta and Botanic Gardens

ARBOR DAY

WITH THE HELP of some good friends, the Los Angeles State and County Arboretum grew and distributed to elementary schools in the county almost 800 trees for Arbor Day programs in early March. The BankAmerica Foundation, Atlantic Richfield Foundation, Oak Tree Foundation and the California Arboretum Foundation sponsor the Arbor Day program. For the past several years, these foundations have cooperated in bringing trees to schools as year-round reminders to the students of the importance of trees to human well-being.

The Tree of the Year for 1982 was the silk tree (*Albizia julibrissin*), a small, umbrella-shaped tree with light sensitive leaves that fold at night. Participating schools each received one tree and a packet of supplementary materials that this year contained an outline for a suggested tree planting ceremony and a short history of Arbor Day celebrations since J. Sterling Morton first proposed a "Tree Planting Day" 110 years ago. Differences in climate made a uniform date impractical nationwide so each state

was allowed to set its own. In California, Arbor Day is celebrated on Mar. 7 to commemorate the birthday of Luther Burbank.

The history also reminded students of the broader implications of Arbor Day:

"Since the first Arbor Day, people have become more aware of the value and benefits of having trees. By understanding the important

role that trees play in their lives, people are also becoming more aware of the importance of conserving trees and other natural resources. Now, when a tree is planted on Arbor Day, it symbolizes not only an appreciation of trees, but also a positive effort toward the conservation of all natural resources to ensure future generations of a beautiful and productive world."



William Aplin

About 800 young silk trees (*Albizia julibrissin*) were distributed to schools throughout Los Angeles County as part of the Arbor Day program.

SHOW SPECTRUM EXPANDS

A Year in the Hall of En



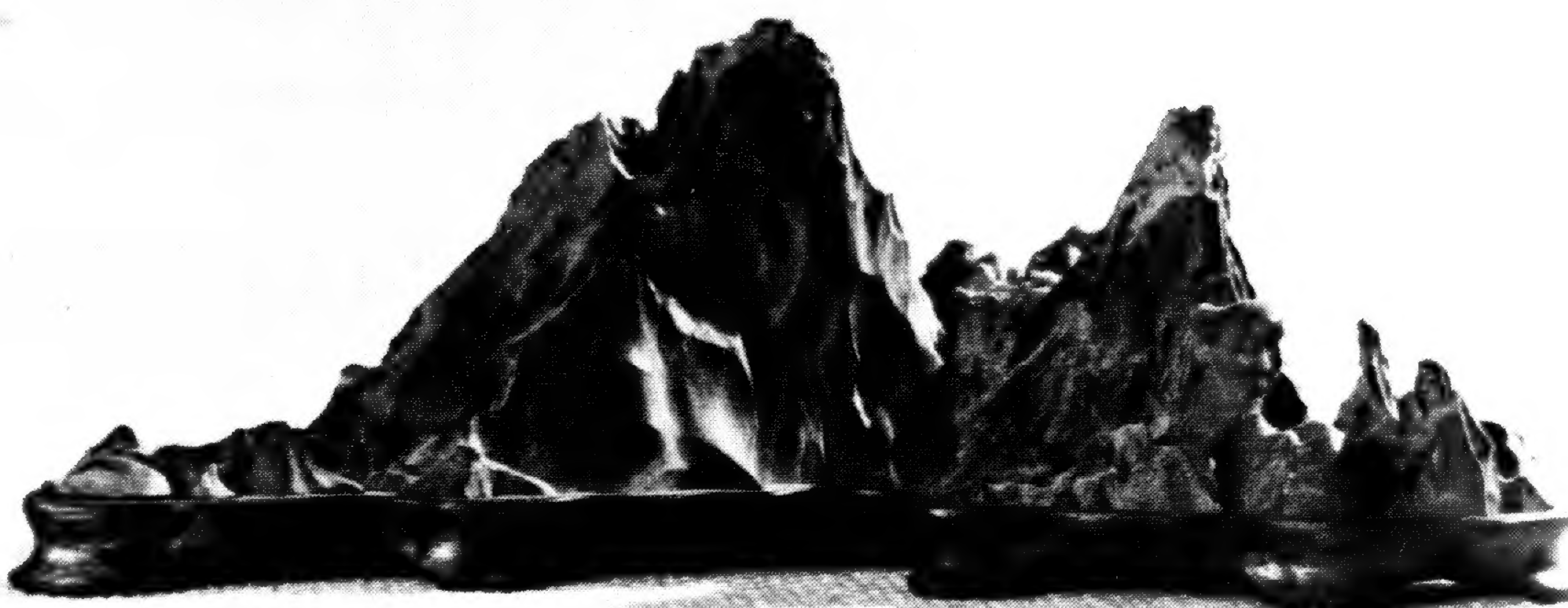
Ikeru Hoseki Koi Club

THE OPENING OF THE HALL of Environmental Education one year ago marked the beginning of a new era of longer and more extensive shows at the Los Angeles State and County Arboretum. The old show facilities in the Lecture Hall were used throughout the week for meetings and classes, limiting plant society shows to weekends.

The Santa Anita Flora and Garden Exposition in November was



San Gabriel Valley Suiseki Club



Environmental Education

the first week-long show at the Arboretum. Garden settings by 16 plant specialty groups played on the theme, "Springtime in the Fall," filling the 9,000-square-foot building with exotic plants.

The size of the 1982 Southern California Flora and Garden Exposition Oct. 29 through Nov. 7 will double to include both the Hall of Environmental Education and the lawn area around the building.

The San Gabriel Valley Suiseki Club and Saikei Society of Southern California held a joint show in January. Their displays of Japanese natural art forms not only ran for a full week, but also illustrated one of the many horticulturally related fields that are compatible with the utilization of Arboretum facilities. This broadened scope of interests will help extend the Arboretum's influence throughout the community.



Hemerocallis and Amaryllis Society



Santa Anita Bonsai Society



SPECIAL BENEFACTORS CHOOSE FIRST ARBORETUM PROJECT

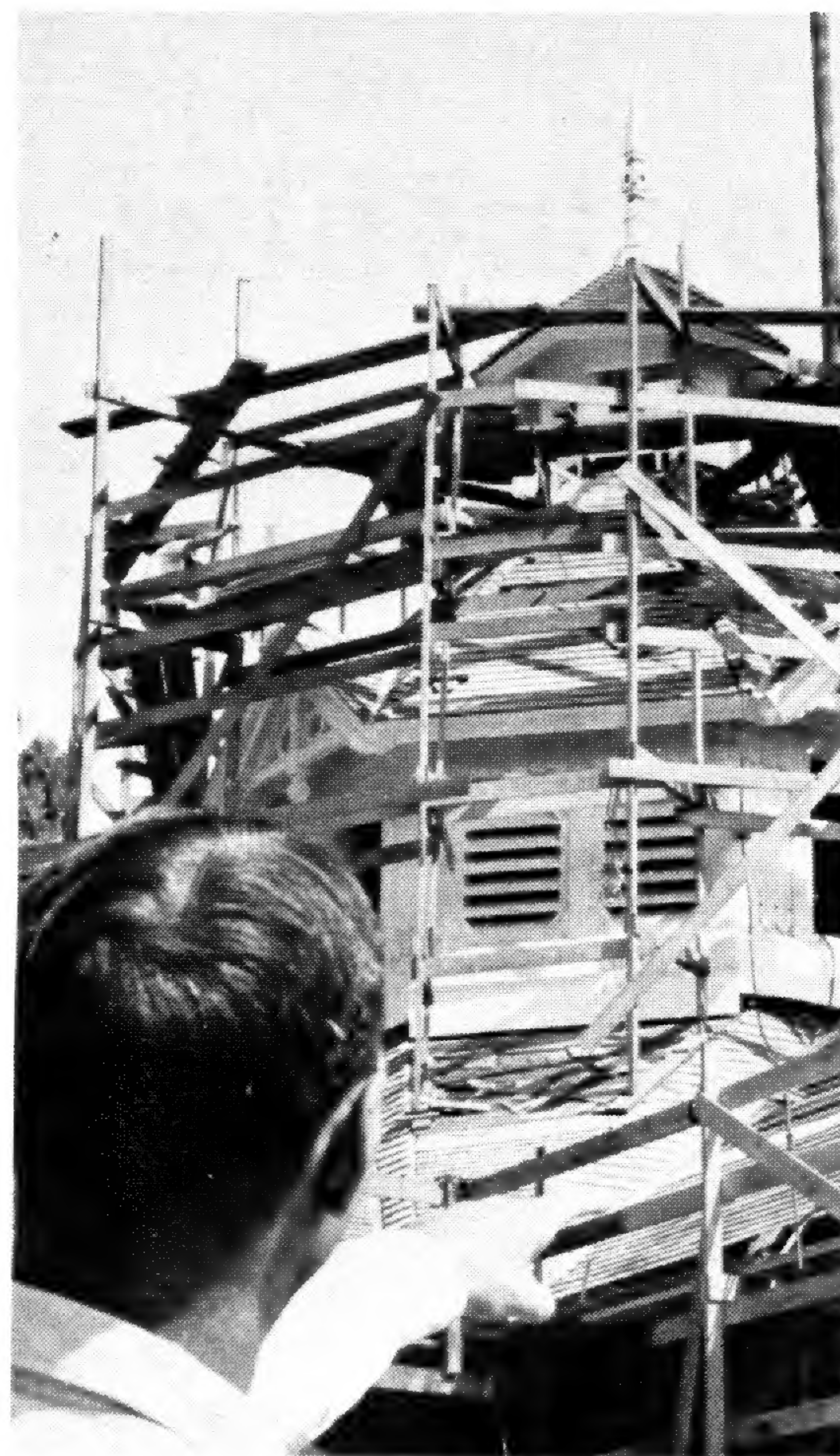
BETTY (Mrs. Sidney) WALL reported that, by early March, 15 donors had joined the Special Benefactors category the Board of Trustees initiated in January. An annual pledge of \$1,000 entitles these generous California Arboretum Foundation members to several privileges as well as the personal satisfaction of knowing that they helped meet a specific need at the Arboretum.

"Special benefactors care deeply about the Arboretum," explained Mrs. Wall. "It's important for them to know that their particular project is going to be done and be done soon."

The first major project to be financed with the special donations will be the renovation of the historical complex. The Forest Lawn Foundation also contributed \$2,500 to the project.

According to Robert Paradise, committee member, the special benefactors also receive a number of individual rewards in recognition of their notable importance to the Arboretum. These benefactors can request personal guided tours of the Arboretum and will receive complimentary tickets to the Baldwin Bonanza XII preview party April 30.

Members of this select group of Special Benefactors include: Mr. and Mrs. John N. Fehrer, Mr. and Mrs. R. Bruce McCallum, Mr. and Mrs. Robert E. Paradise, Frances S. LaMar, Mr. and Mrs. Sidney Wall, Mr. and Mrs. Hugh L. MacNeil, Mr. and Mrs. Robert Strub, Mr. and Mrs. Randall Stoke, Mrs. R. O. Ragsdale, Mr. and Mrs. C. J. Pan-kow, Mr. Gene Summers, Mr. and Mrs. Richard M. Ray, Mrs. Don Freeberg, Mr. and Mrs. Richard N. Frank, and Mr. and Mrs. E. R. Slavik.



The Coach Barn roof has deteriorated badly since the repairs shown in this photo were made in 1958.



The California Arboretum Foundation bought a new \$75,000 tram that was delivered in early January. The 60 passenger vehicle makes it possible to accommodate large weekday charter groups as well as additional weekend visitors who request guided tours of the Arboretum.



LEPTOSPERMUM

Australian tea-trees

JAMES COOK, English naval captain and explorer, astounded 18th century Europe with discoveries of strange islands and exotic wildlife. More than 1,000 new species of plants were introduced to the world by Cook and his associates, Sir Joseph Banks and Dr. Daniel Solander. After months at sea during the second voyage of 1772-1775, Cook's supplies of fresh plant foods were either exhausted or contaminated, and some of his men had contracted dysentery, scurvy and other diseases. On the eastern coast of Australia, landing parties from the ships gathered botanical specimens and food plants and attempted to come up with a potable tea. Leaves of one of the plants, thereafter to be known as tea-tree, are credited with helping to remedy the vitamin deficiencies and other health problems of Cook's seamen.

Not to be confused with the true tea plant of commerce (*Camellia sinensis*) or with the ornamental ti plant pronounced 'tee' (*Cordyline terminalis*), tea-trees are members of the genus *Leptospermum* of the myrtle family (Myrtaceae). About 40 species of these evergreen shrubs and small trees are native to Australia, Tasmania, New Zealand, New Caledonia and the Malay Archipelago. The generic name is from the Greek words *leptos*, thin or narrow, and *spermatos*, seed. The name was applied by Johann Reinhold Forster

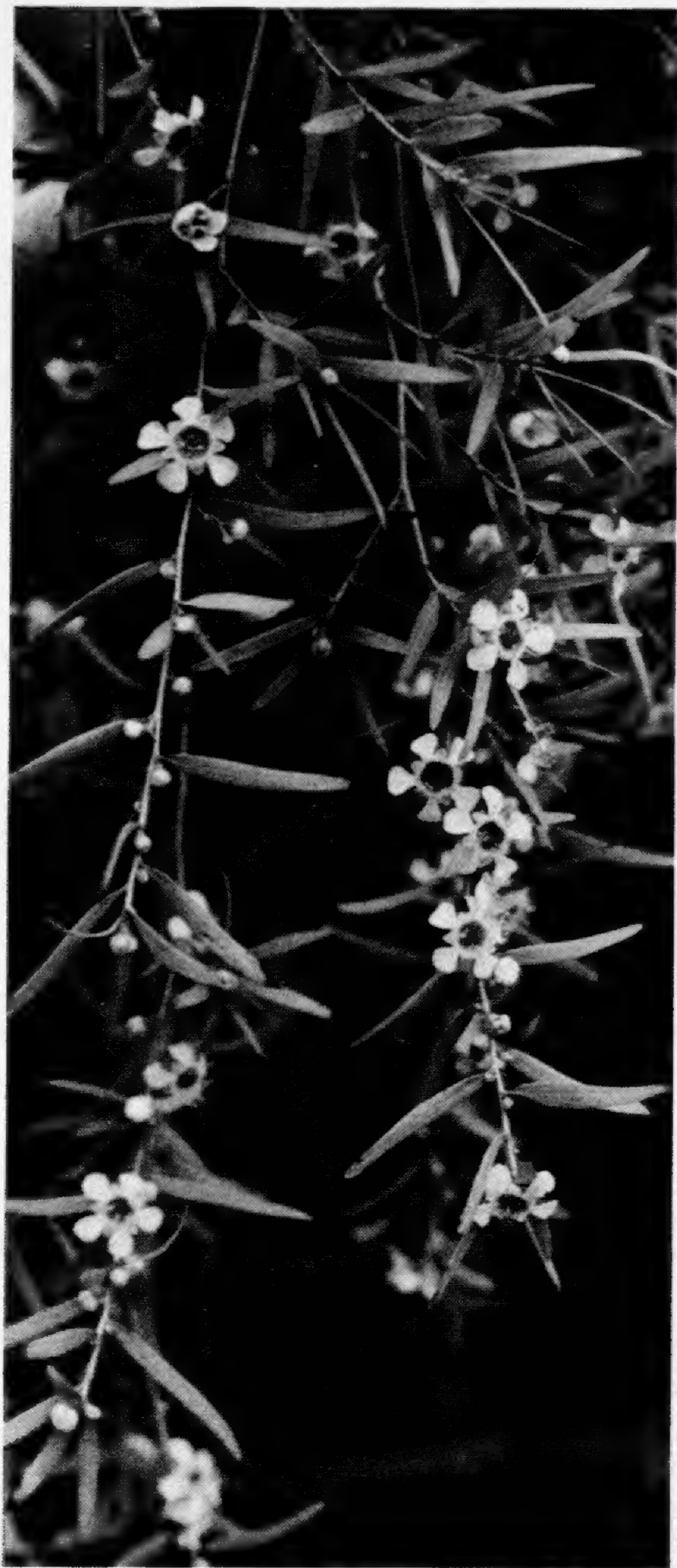
and Johann Georg Forster, a father and son team of botanists who accompanied Captain Cook on his second voyage. Dr. William Anderson, Cook's ship's surgeon on the third voyage (1776-1779), also used leaves of the manuka tea-tree (*L. scoparium*) as a substitute for Chinese tea. He described it as having a pleasant taste and smell.

Leptospermums range in height from the nearly prostrate cultivated varieties scarcely 1 to 2 feet tall, through shrubs 6 to 10 feet tall, to the less common trees 20 to 30 feet high. An interesting gradation in height is known within at least one species, the heath tea-tree (*Leptospermum ericoides*) of New Zealand. Strong winds sweeping the high



William Aplin

Leptospermum scoparium, an evergreen, shrubby species in the Arboretum's Australian Section, has showy double, white flowers and many small, needle-like leaves.



LuAnn B. Munns

Axillary or terminal pale yellow-white flowers and lemon scented leaves on pendulous branchlets characterize *L. Petersonii*.

altitudes in most of its native range reduce the plants to a cushionlike habit only a few inches high; under ideal growing conditions in the lowlands, however, this species may attain a height of 60 feet.

Leaves of the genus are usually small, from 3/16 inch to about 2 inches long and from 1/12 inch to about 3/8 inch wide. They are alternate to clustered in fascicles on the erect to prostrate branches and vary from glabrous to bearing numerous fine transparent hairs on blade midribs and margins. Depending upon the species, leaves may be linear, lanceolate, rounded, or paddle-shaped. They may be

stiff and leathery or flexible, with toothless margins and sharp tips. Leaf colors range from dark or medium green to yellow or gray green, with zero to three prominent veins. Oil glands dotting the leaves of many species make the crushed leaves distinctively aromatic.

Leptospermum species bloom profusely in spring and summer months. The nearly stalkless to sessile flowers grow singly or in clusters of two or three, scattered along the branches within leaf axils or at the tips of short branchlets. Each small roselike flower, from 1/3 to 3/4 inch across, has five sepals, five clawed petals, numerous stamens no longer than the petals, and a single ovary with few to many ovules. Petals are arranged around a hard calyx cone or cup, with the stamens forming a ring just inside the corolla. Flower color ranges from white to pink or rose-pink, red, or occasionally a chartreuse yellow. The petals fall away after pollination and seed development, leaving a hard, brown to red-brown capsular fruit about 1/4 inch wide. These capsules may persist on plants for many months until the slender red-orange seeds are released. The previous year's fruit and the current season's flowers and fruits are often located on the same branch.

Historically, tea-trees have had multiple uses. The aborigines of Australia and New Zealand, and later the early English voyagers and colonists, brewed teas from leaves of several species. On their second voyage, Cook's men mixed the leaves of manuka tea-tree (*L. scoparium*) with a boiled extract of the rimu (*Dacrydium cupressinum*), a cone-bearing tree of the podocarpus family, to make a naturally-fermented beer. The bark of *L. scoparium* was also used by New Zealand aborigines to roof their houses. The Maori people of New Zealand made

paddles, spears and other weapons, fishing gigs, carved articles and utensils from the deep red wood.

Australians and New Zealanders have derived useful economic products from tea-trees for more than 200 years. Citral, a valuable lemon-scented derivative of *L. petersonii*, is employed as an additive in food flavorings and perfumes. The hard, durable wood of larger tea-tree specimens is made into jetty piles, fence rails, frameworks, wheel spokes, and firewood. Farmers use branches as barriers against sand and windstorms, and campers may strip branches from the shrubs for comfortable bedding. Rural settlers have crafted useful brooms from branches of *L. flavescens* and *L. scoparium*. The wood of the latter is also used for cabinets and inlay work, and an exudate of the shrub has been useful in treating scalds and burns.

The heath tea-tree (*L. ericoides*) of New Zealand has an extraordinarily varied medicinal usage. Infusions of the fruits have been used for inflammation, colic, and diarrhea, while poultices of the fruits were applied to open wounds and running sores. Burns, scalds, coughing, bad breath and blood problems reputedly have been remedied by treatments with the sap. Infusions of the bark and leaves apparently have been successful in cases of headache, skin diseases, internal disorders, eye problems, dysentery and throat complaints.

Tea-trees probably are most famous for the brewed hot drinks made from their leaves. Numerous accounts of the satisfying teas made from leptospermums appear in horticultural literature. During the preparation of this article, the author sampled laboratory-brewed teas made from leaves of Australian tea-trees (*L. laevigatum*), manuka tea-tree (*L. scoparium*) and *L. petersonii*. The Australian tea-tree provides a drink with a delicate bou-

quet and an herblike flavor. Manuka tea is amber-colored with a smooth taste and subtle fragrance, *L. petersonii* makes a pleasantly lemon-flavored brew.

The Los Angeles State and County Arboretum maintains representatives of more than half of the world's cultivated *Leptospermum* species in its living collection. Among the most renowned of these are *L. laevigatum* (Australian tea-tree, coast tea-tree, Victoria tea-tree, *L. scoparium* (manuka tea-tree, broom tea-tree, New Zealand

tea-tree, Maori name manuka means weapon wood); *L. ericoides* (heath tea-tree; Maori names are rawiri, kahikitoa, manuka-rauriki, kanuka, and maru), and *L. lanigerum* (woolly tea-tree).

Three 12-foot specimens of the Australian tea-tree may be seen in the Sunset Demonstration Home Garden. Two other specimens are located in the Historical Section; one, 6 feet high with a 40-foot prostrate trunk, is along the roadside northeast of the Herb Garden and the other, a 13-foot tree, is in the

lawn north of the Coach Barn. These interesting tea-trees have deeply-furrowed, twisted trunks with bark shedding in long strips. Their many white flowers and general habit provide an attractive landscape effect.

The majority of *Leptospermum* plants in the collection are concentrated in the northwest portion of the Australian Section enclosed by the loop of the road and in a strip west of the propagation greenhouses. Here are many 6- to 10-foot shrubs of *L. scoparium* and its cul-



William Aplin

Exquisite examples of nature's sculpturing, the often twisted, cablelike trunks of *L. laevigatum* distinguish its habit from that of many other tea-tree species. The trees are native to eastern Australia and Tasmania, thrive in full sun, and provide unusually beautiful lawn specimens.

tivated varieties, including the beautiful bronze-leaved and rose-red flowered cv. *Nicholsii*; 13-year old specimens of the heathlike *L. ericoides*, with needle-shaped leaves and white flowers; shrubs of the ovate-leaved *L. squarrosus*, with small pink-tinged white flowers; and the woolly tea-tree (*L. lanigerum*) with long, silky hairs covering its young branchlets, leaves and calyx. Here also may be found the sub-arborescent lemon-scented *L. peter-sonii*; 8- to 10-foot shrubs of the yellow tea-tree, *L. flavescens*, covered with needle-like leaves and striking 1/2 inch-wide yellow-white flowers; the juniper tea-tree (*L. juniperinum*), 6-foot shrubs with stiff pungent leaves; and many others. Two 5- to 7-foot specimens of *L. scoparium* cv. Pompon, with

gray-brown peeling bark and variegated rose-pink flowers grow west of the Peacock Pavilion just south of the South African Section.

In their native ranges, tea-trees are known to survive in habitats characterized by extremes of soil and climate. The manuka, for example, has been described as a "plastic" plant because it adapts to wide variations in environment. This species grows from high mountain tops to seashore areas, in bogs, in dry soils and on rocky cliffs. Likewise, the tree manuka and the woolly tea-tree may grow either in rich soils or in soils nearly deficient in humus and minerals. Tea-trees may have evolved small leaves to reduce water loss by transpiration as an adaptation to xeric environments. In contrast, leptospermums growing

in moister habitats are known to possess somewhat larger leaves and associate with such humid zone indicators as orchids and ferns.

Open habit, multiple branches clothed in small leaves, and attractive brownish bark make tea-trees excellent lawn or garden additions. Many species withstand neglect and extreme dryness, but they will respond to a minimum of care with a profusion of small, attractive, fragrant flowers. One may simply plant them, water and feed them moderately, prune occasionally and enjoy these internationally-prized plants for many years.

Dr. Cromwell, part-time member of the Arboretum staff, received his Ph.D. in botany from Claremont Graduate School.

DESCANSO GARDENS, La Canada

MAY 1 thru 9 — 9 a.m. to 4:30 p.m.

Bonsai Show and Sale

Descanso Gardens Bonsai Society**

JUNE 6 — 9 a.m. to 4:30 p.m.

Arts and Crafts Festival*

JUNE 6 — 2:30 to 4 p.m.

Madrigal Singers, La Canada

High School*

JUNE 27 — 2:30 p.m. to 4 p.m.

String Concert

"Super Bows" La Crescenta

High School*

JULY 4 — 2:30 to 4 p.m.

Music on the Green

Series of live concerts*

JULY 11 — 2:30 to 4 p.m.

Music on the Green

Series of live concerts

JULY 18 — 2:30 to 4 p.m.

Music on the Green

Series of live concerts*

JULY 25 — 2:30 p.m. to 4 p.m.

Music on the Green

Series of live concerts*

*Sponsored by Descanso Gardens Guild

**Cosponsored by Descanso Gardens Guild

LOS ANGELES STATE & COUNTY ARBORETUM, Arcadia

MAY 1, 2 — 9 a.m. to 3 p.m.

Baldwin Bonanza XII*

Plant Sale

MAY 16 — 11 a.m. to 4:30 p.m.

Epiphyllum Show

Epiphyllum Society of America**

CALENDAR

MAY, JUNE, JULY 1982

MAY 22, 23 — 9 a.m. to 4:30 p.m.

Multicolored Azalea Show

Valley Satsuki Azalea Society**

MAY 29, 30 — 9 a.m. to 4:30 p.m.

Bonsai Show

Santa Anita Bonsai Society**

JUNE 12, 13 — Sat. 1 p.m. to 4:30 p.m.

Sun. 9 a.m. to 4:30 p.m.

Show of Miniature Roses

San Gabriel Valley Rose & Horticultural Society**

JUNE 19, 20 — Sat. 1 p.m. to 4:30 p.m.

Sun. 9 a.m. to 4:30 p.m.

Daylily Show

Southern California Hemerocallis & Amaryllis Society**

JUNE 26, 27 — Sat. 1 p.m. to 4:30 p.m.

Sun. 9 a.m. to 4:30 p.m.

Gladiolus Show

Southern California Gladiolus Society**

JULY 3, 4, 5 — 9 a.m. to 4:30 p.m.

Cactus and Succulent Show

Cactus and Succulent Society**

JULY 10, 11 — Sat. 1 p.m. to 4:30 p.m.

Sun. 9 a.m. to 4:30 p.m.

Begonia Show

American Begonia Society**

*Sponsored by California Arboretum Foundation

**Cosponsored by California Arboretum Foundation

SOUTH COAST BOTANIC GARDEN, Palos Verdes Peninsula

MAY 1, 2 — Sat. 12 to 4:30 p.m.

Sun. 9 a.m. to 4:30 p.m.

Bromeliad Show

South Bay Bromeliad Society**

MAY 15, 16 — 9 a.m. to 4 p.m.

Fiesta de Flores*

Plant Sale

MAY 22, 23 — Sat. 12:30 to 4:30 p.m.

Sun. 9:30 to 4:30 p.m.

Rose Show

South Coast Rose Society**

MAY 30 — 2 p.m.

Gardening Talk*

Virginia Fleener, Gardener

JUNE 5, 6 — Sat. 9:30 to 4:30 p.m.

Sun. 9 a.m. to 4:30 p.m.

Fuchsia Show and Sale

South Coast Fuchsia Society**

JUNE 12, 13 — Sat. 12 to 4:30 p.m.

Sun. 9:30 to 4:30 p.m.

Cactus and Succulent Show

South Coast Cactus &

Succulent Society**

*Sponsored by South Coast Botanic Garden Foundation

**Cosponsored by South Coast Botanic Garden Foundation